

WHAT IS CLAIMED IS:

1. A method for reducing a size in designing a servo system simulation program configured in a programmable calculator, the method comprising the steps of:

determining a servo type as a generalized type and assigning servo parameters;

5 determining an input function as a combination function and displaying the input function by using a plot;

the servo type generating an output function and a state variable according to the servo parameter and the input function; and

displaying the output function by using a plot.

10 2. The method of claim 1, wherein the method determines the servo type is a type of a Laplace transfer function.

3. The method of claim 2, wherein the method determines the servo type to be a Laplace transfer function and the generalized type is a combination of TYPE 0 , TYPE I, and TYPE II servo in the open loop transfer function.

15 4. The method of claim 1, wherein the combination function is a combination of a step function and a ramp function.

5. The method of claim 1, wherein the step of displaying the output function using the plot further comprises the steps of:

increasing a number of executions by one; and

20 determining whether the number of executions is a predetermined value;

wherein if the number of the executions is not equal to the predetermined value, the program returns to a step where the servo type generates the output function and the state variable according to the servo parameters and the input function.

6. The method of claim 5, wherein the method further includes the step of: before the servo type generates the output function and the state variables again by using the servo parameters and the input function, the servo type uses the state variable generated out in the previous calculation as the state variable to be used this time to calculate the output function.

5

10047653 041402